

Exploring the Relationship Between Corporate Social Indicators and Financial Performance in Europe: A Correlational Study

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Abstract:-

Purpose: - The purpose of this study is to investigate the relationship between corporate social indicators and financial performance in Europe. Corporate social responsibility (CSR) has become an increasingly important aspect of business practices, as companies are expected to operate in a socially and environmentally responsible manner. Previous research has shown mixed results on the relationship between CSR and financial performance, with some studies suggesting that CSR positively impacts financial performance, while others suggest a neutral or negative effect. In this study, we aim to contribute to this debate by examining the association between corporate social indicators and financial performance in Europe. Specifically, we will investigate the relationship between environmental sustainability, social responsibility, ethical governance, and financial performance of companies across different industries and countries in Europe. We will use a correlational design, based on publicly available data, and employ statistical methods to analyse the data. The findings of this study will provide insights into the potential linkages between CSR and financial performance in Europe, and inform business practices and policy decisions aimed at promoting sustainable and responsible corporate behaviour. By highlighting the benefits and drawbacks of CSR practices, this study will contribute to the ongoing discussion of the role of businesses in addressing social and environmental issues, while achieving financial performance.

Design/Methodology/Approach - This study employs a correlational research design to investigate the relationship between corporate social indicators and financial performance in Europe. The study will use secondary data from publicly available sources such as annual reports, sustainability reports, and financial statements of companies operating in Europe. Specifically, the sample will consist of a cross-section of companies in various industries and countries in Europe. We will use a multi-dimensional approach to measure corporate social indicators, including social responsibility and ethical governance. To assess the financial performance of companies, we will use common financial indicators such as return on assets (ROA) and return on equity (ROE). In addition, we will control for

other firm-specific characteristics, such as industry and sociocultural factors, that may influence the relationship between corporate social indicators and financial performance. We will employ statistical methods, such as Pearson's correlation and multiple regression analysis, to test the hypotheses and examine the strength and direction of the relationship between corporate social indicators and financial performance. The statistical analysis will be conducted using statistical software such as SPSS. Overall, this research design and methodology will enable us to investigate the relationship between corporate social indicators and financial performance in Europe, and contribute to the ongoing discussion on the importance of CSR practices in achieving sustainable and responsible corporate behaviour.

Practical information - In this study, we obtained the data on corporate social indicators and financial performance of companies in Europe from Refinitiv Eikon, a leading financial data provider. Refinitiv Eikon provides a comprehensive range of financial data, including company financials, industry data, and sustainability data, to enable researchers to conduct rigorous and reliable analyses. To collect the data for this study, we used Refinitiv Eikon's screening and search functionality to identify companies that met our inclusion criteria, such as being publicly listed and operating in Europe. We then extracted the required data, such as financial statements and sustainability reports, using Refinitiv Eikon's data download tools. The data collection process was conducted over a period of several weeks, to ensure the accuracy and completeness of the data.

Originality/Value - This study contributes to the ongoing discussion on the relationship between corporate social indicators and financial performance by investigating this relationship in the context of European companies. While prior studies have examined this relationship in the context of developed economies such as the United States, there is a gap in the literature regarding the relationship between corporate social indicators and financial performance in Europe.

Furthermore, this study uses a multi-dimensional approach to measure corporate social indicators, including social responsibility and ethical governance,

which provides a more comprehensive understanding of the impact of CSR practices on financial performance. By controlling for other firm-specific characteristics, we aim to provide a more robust analysis of the relationship between corporate social indicators and financial performance.

Finally, this study contributes to the literature on the practical implications of CSR practices by exploring the potential benefits and drawbacks of such practices on financial performance in the European context. By providing insights into the relationship between CSR practices and financial performance, this study may assist policymakers and business leaders in making informed decisions regarding the adoption and implementation of CSR practices.

Keywords:- *Corporate Social Responsibility, Financial Performance, Ethical Governance, Social Indicators.*

I. INTRODUCTION

The relationship between corporate social responsibility and financial performance has been a topic of interest in the academic and business communities for many years. Numerous studies have explored this relationship from various angles, with some suggesting a positive correlation between corporate social indicators and financial performance, while others have found no significant correlation. However, most studies have been conducted in developed countries and focused on specific industries or time periods, leaving gaps in our understanding of how this relationship may vary across regions and industries.

To address this gap, this study explores the relationship between corporate social indicators and financial performance in 299 companies from 13 industries in Europe, observed over a period of 9 years, for a total of 1122 distinct observations. The study focuses on the following countries chosen as reference: the Czech Republic, Romania, Poland, Denmark, Sweden, Italy, Portugal, Spain, Belgium, Germany, and the Netherlands. These countries were selected to represent distinct regions of Europe: Eastern Europe (the Czech Republic, Romania, Poland), Northern Europe (Denmark, Sweden), Southern Europe (Italy, Portugal, Spain), and Western Europe (Belgium, Germany, the Netherlands).

The main objective of this study is to examine whether there is a relationship between corporate social indicators and financial performance, and if this relationship is influenced by region or industry. To achieve this objective, we employ a correlational study design and use Refinitiv Eikon data to collect financial data and corporate social indicator data. We believe that the findings of this study will contribute to the existing literature on the relationship between corporate social responsibility and financial performance, particularly in the European context. Additionally, this study provides practical insights for managers and policymakers on how to improve financial performance while maintaining social responsibility.

II. LITERATURE REVIEW

Corporate social responsibility (CSR) has become an increasingly important topic in the business world in recent years. Companies are expected to not only be financially profitable but also to be socially responsible and environmentally conscious. The concept of CSR refers to a company's efforts to balance its economic, social, and environmental impacts, while also meeting the needs of its stakeholders. The purpose of this literature review is to explore the relationship between corporate social indicators and financial performance in Europe, and to provide insights into the current state of research in this area.

The term "social responsibility" has evolved over time and has various definitions. The International Organization for Standardization (ISO) provides a comprehensive definition that describes social responsibility as "the responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behavior that contributes to sustainable development" (ISO 26000:2010). Implementing a social responsibility initiative does not necessarily lead to economic benefits for an organization; instead, it is contingent upon consumers' evaluation of such initiatives in relation to the company's activities, not just its intentions. Additionally, the concept of corporate social responsibility (CSR) entails creating a safe working environment that addresses diversity and facilitates equitable distribution of the organization's profits in an ethical manner (Zulfiqar, 2019). Most organizations face the challenge of striking a balance that benefits all parties. The arguments supporting CSR suggest that corporations can only sustain their social responsibility through balancing the interests of shareholders and investors.

According to Hou (2019), Corporate Social Responsibility (CSR) is an essential strategy used by organizations to create value and respond to changes in the culture of stakeholders. CSR is also used as a corrective measure to address challenges created by the business or pre-existing conditions. Furthermore, companies deploy CSR as a philanthropic activity to assist disadvantaged communities by providing amenities and infrastructures. Tech giants in the US have been observed to intervene directly in their host communities or develop applications that are seen as a contribution to society. Hamidu, Haron, and Amran (2015) note that the core issues of CSR include balancing competing stakeholder claims with corporate resources and financial transparency and accountability to shareholders and other stakeholders. CSR provides a framework that allows organizations to manage externalities, and voluntary elements provide organizations with the flexibility to assume responsibilities and go beyond legal minimums for the benefit of society and multiple stakeholders.

Several theories have been developed to explain the relationship between CSR and financial performance. The stakeholder theory suggests that companies have a responsibility to all of their stakeholders, including customers, employees, shareholders, and the community, and

that by fulfilling this responsibility, they will ultimately enhance their financial performance (Freeman, 1984). On the other hand, the agency theory suggests that companies have a primary responsibility to their shareholders, and that any investment in CSR activities must be justified by a positive impact on financial performance (Jensen & Meckling, 1976).

In the literature on corporate social responsibility (CSR), scholars have categorized the impact of CSR activities on corporate performance into three categories. The first category suggests that CSR has a positive effect on financial performance, although this claim has been disputed by some researchers (Orlitzky et al., 2003). According to Berrone, Surroca, and Tribo´ (2007), engaging in CSR activities can enhance an organization's ethical identity, which leads to substantial stakeholder satisfaction and positively influences financial performance. In addition, Giannarakis et al. (2016) analysed a sample of 104 US companies across nine leading industries listed on the S&P 500 Index between 2009 and 2013 and found that involvement in socially responsible initiatives has a significantly positive effect on financial performance. Other studies have supported this finding, including Oh, Hong and Hwang (2017) and Fonseca and Ferro (2016). These studies show that companies that implement socially responsible policies and satisfy the expectations of their stakeholders achieve higher economic benefits than their competitors and achieve positive differentiation. Control variables such as total compensation to directors, CEO duality, and women's presence on the board were found to influence financial performance statistically in some of the studies.

There is a growing body of empirical research that examines the relationship between corporate social indicators and financial performance. The majority of studies have found a positive relationship between CSR and financial performance (Eccles & Serafeim, 2013; Ormazabal & Suetens, 2018). For example, a study by Eccles and Serafeim (2013) found that companies that were socially responsible had a higher return on assets (ROA) than companies that were not. Similarly, Ormazabal and Suetens (2018) found that companies that were more socially responsible had a higher return on equity (ROE) than companies that were less socially responsible.

However, some studies have found mixed results or no relationship between CSR and financial performance (Margolis & Walsh, 2003; McWilliams & Siegel, 2001). For instance, Margolis and Walsh (2003) found that there was no relationship between a company's social and environmental performance and its financial performance, while McWilliams and Siegel (2001) found that the relationship between CSR and financial performance was dependent on the industry in which the company operated.

As noted, the relationship between CSR and financial performance may be dependent on the industry in which the company operates. Some industries may benefit more from CSR activities than others, depending on the nature of their business and the expectations of their stakeholders. For example, a study by Orlitzky et al. (2003) found that the relationship between CSR and financial performance was

stronger in industries that were highly regulated, such as the energy industry, compared to less regulated industries, such as the service industry.

Another factor that may impact the relationship between CSR and financial performance is the region in which the company operates. Studies have found that the relationship between CSR and financial performance may vary across different regions of the world (Ameer et al., 2018; Filatotchev et al., 2019). For example, Ameer et al. (2018) found that the relationship between CSR and financial performance was stronger in Western Europe compared to Eastern Europe, while Filatotchev et al. (2019) found that the relationship between CSR and financial performance was stronger in countries with weaker institutional environments, such as Eastern Europe, compared to countries with stronger institutional environments, such as Western Europe.

There are several methodological issues that researchers must consider when examining the relationship between CSR and financial performance. One issue is the definition and measurement of CSR. CSR can be defined and measured in many different ways, and different measures may capture different aspects of CSR

III. METHODOLOGY

The research paper proposes three hypotheses to investigate the relationship between social and financial performance indicators of companies.

- The first hypothesis (H1) is that there exists a correlation between social performance (SP) indicators and financial performance (FP) indicators. This hypothesis is further divided into three possible variants: (H1-a) direct correlation, where positive changes in SP indicators lead to positive changes in FP indicators and vice versa for negative changes; (H1-b) indirect correlation, where positive changes in SP indicators lead to negative changes in FP indicators and vice versa for negative changes; and (H1-c) the null hypothesis, where changes in SP indicators cannot be attributed to changes in FP indicators;
- The second hypothesis (H2) proposes that the intensity of the correlation between SP and FP indicators differs based on the geographic location of the firms that make up the sample;
- The third hypothesis (H3) suggests that the intensity of the correlation between SP and FP indicators differs based on the industry sector of the firms that make up the sample.

The research paper aims to empirically test these hypotheses using data from a sample of companies and statistical analysis methods. The results of the study can provide insights into the relationship between social and financial performance and the factors that influence this relationship.

The social and financial performance indicators used in this study were selected through processing a sample of firms in all four targeted European regions using the Thompson-

Reuters database (Refinitiv Eikon, 2023). Analysis of the database yielded a total of 4591 firms, from various industries, with financial and social indicators calculated according to the provider's methodology, for a period of 15 years, from 2007 to 2021 inclusive, with the latter being the latest fiscal year available at the time of the database query. By applying a series of filters to ensure complete data among the chosen indicators, the resulting sample consisted of 299 unique firms and 1122 data series, covering a time period of 9 years, which were subjected to further detailed analysis.

To select appropriate indicators for assessing social and financial performance of companies, we began with the companies in each of the representative countries, and identified those indicators that corresponded to Global Reporting Initiative (GRI) standards, specifically those within the social component of the standards (GRI 400: Social). These indicators included the GRI reporting score, employment score, anti-exploitation of minors' policy score, diversity and equal opportunities score, diversity and equal opportunities policy score, score based on the number of women employed, score based on the number of training hours, free association policy score, and policy of respect for human rights score. In addition, four additional indicators were considered necessary, including two indicators for financial performance, one for the cost of donations, and one for the policy for social involvement. We also included an indicator for awards received for CSR initiatives.

To determine financial performance, we selected four main indicators, including earnings per share (EPS), return on capital employed (ROCE), return on assets (ROA), and return on equity (ROE). To simplify the analysis, we developed a financial performance score based on these indicators. To create this scoring model, we divided the data series into percentiles and assigned ranks for each indicator. We used a category division according to the percentiles from 10 to 10 percentage points. We assigned weights of 40% for EPS, 30% for ROA, 20% for ROCE, and 10% for ROE. After calculating the score for each data entry, we homogenized the data for analysis.

In this study, the dependent variable of financial performance score and the independent variables consisting of the thirteen component elements of the social performance score, without weighting, were included for analysis. The statistical method used for the regression analysis was Stepwise, as a result of the high number of independent variables involved. This method selects independent variables based on their Pearson coefficient and only includes those variables that exceed a significance threshold in the model. The Stepwise model progressively incorporates variables according to their accuracy in predicting the dependent variable, excluding those that are not statistically significant.

The sample of 1122 observations and scores obtained by firms in the analyzed categories were studied, revealing that the average score obtained in the twelve categories of indicators remains relatively constant, ranging from 5.498 to 7.598, except for the social responsibility policy and RSC

awards, which may have a maximum value of 10 or a minimum value of 0. The data obtained from the sample indicate that the majority of the scores have means between 5.498 and 7.598 points, with standard deviations ranging from 1.019 to 2.881.

In order to test hypotheses H2 we segmented the sample based on the division by European regions and the business sectors in which they operate. To test hypothesis H2, we divided the sample of 1122 observations into four distinct categories: 65 observations from Eastern Europe, 142 from Northern Europe, 436 from Southern Europe, and 479 from Western Europe.

To test hypothesis H3, we chose to segment the sample based on the industry sector of the firms. Considering that we have identified 15 sectors of activity within the sample, we have chosen to group them into 5 homogeneous categories in order to allow for hypothesis testing.

The resulting categories are: Manufacturing (N=469) - a category that includes only the Manufacturing sector, as it has the most observations; Information (N=155) - a category that includes only the Information sector, as we already had a large number of observations in this sector; Utilities and Natural Resources Exploitation (N=144) - a category that combines the Utilities and Mining industries, Quarrying and Extraction of Oil and Gas sectors; Trade and Logistics (N=127) - a category that combines the Wholesale and Retail Trade and Transport and Storage sectors; Construction and Real Estate (N=115) - a category that combines the Construction and Real Estate and Rental sectors; Services (N=112) - a category that combines the Professional, Scientific and Technical Services, Administrative and Support Services, Waste Management and Emergency Remediation, Finance and Insurance, Accommodation and Food Services, Health Care and Social Assistance, and Other Services (excluding Public Administration) sectors.

IV. RESULTS AND CONCLUSIONS

The present study aimed to investigate the correlation between corporate social indicators and financial performance in Europe. To achieve this objective, a comprehensive analysis of a sample of European companies was conducted. The results of this study provide valuable insights into the relationship between corporate social responsibility and financial performance in the European context. These findings have implications for both academics and practitioners, as they shed light on the importance of social responsibility for companies operating in the European market. Furthermore, the conclusions of this study contribute to the ongoing debate on the role of social responsibility in shaping the financial performance of companies.

The analysis of the data indicates the presence of regional differences, proving the second proposed hypothesis. To identify the most statistically significant coefficients ($p < 0.05$) for each category, we scrutinized the results. In the Eastern European region, we found three indicators that were moderately linked with the PF score.

Specifically, the "Score of free association policy" was indirectly correlated with PF, with an intensity of the link of $R=-0.411$, the "Score of employment rate" was directly correlated with PF, with an intensity of the link of $R=0.405$, and the "Score of human rights policy" was indirectly correlated with PF, with an intensity of the link of $R=-0.308$. In Northern Europe, four indicators were weakly correlated with the PF score, including "Score of employment rate" ($R=0.286$), "Score of free association policy" ($R=0.229$), "Score of anti-exploitation policy for minors" ($R=0.196$), and "Total donation cost in Euros" ($R=0.165$). Moreover, the "Score of GRI reporting" was indirectly correlated with PF, with a weak intensity of the link of $R=-0.270$. In Southern Europe, we found four indicators that were weakly correlated with the PF score, including "Total reported donations to income in millions" ($R=0.157$), "Score based on the number of training hours" ($R=0.131$), "Score based on the number of employed women" ($R=0.129$), PS score ($R=0.126$), and "Score of anti-exploitation policy for minors" ($R=0.100$). Finally, in Western Europe, four indicators were weakly correlated with the PF score, including PS score ($R=0.182$), "Score of anti-exploitation policy for minors" ($R=0.138$), "Score of employment rate" ($R=0.100$), and "Score of GRI reporting" ($R=0.098$).

Upon analyzing the data, disparities emerged among fields of operation. The present study concentrates on statistically significant correlations ($p<0.05$) for each category individually. In the Manufacturing category, six indicators demonstrated a direct correlation with the PF score. These include the PS score, "Employment rate score," "GRI reporting score," "Anti-child labor exploitation policy score," "Achievement score of diversity and equal opportunities objectives," and "Total donation cost in Euros." Each of these indicators exhibited a weak relationship with the PF score, with coefficients of determination (R) ranging from 0.116 to 0.232. Within the Information category, only one indicator was found to be directly correlated with the PF score, namely "Total reported donations to revenues in millions," with an R value of 0.163. The Utilities and Natural Resources Exploitation category presented two indicators that showed a correlation with the PF score, albeit weakly. Specifically, the "Human rights compliance policy score" demonstrated an inverse relationship ($R=-0.225$), while "Total reported donations to revenues in millions" had a direct correlation ($R=0.172$). In the Construction and Real Estate category, the only indicator significantly correlated with the PF score was "Freedom of association policy score," exhibiting an inverse correlation with an R value of -0.223 . In the Commerce and Logistics category, three indicators were found to be significantly correlated with the PF score: "Employment rate score," "Score based on the number of employed women," and the PS score, each exhibiting a weak positive correlation with the PF score (R values ranging from 0.196 to 0.297). Lastly, within the Services category, two indicators demonstrated a significant correlation with the PF score: "Employment rate score" and "Total reported donations to revenues in millions," with weak direct and inverse relationships, respectively (R values of 0.287 and -0.243).

The statistical analysis reveals that the social involvement of a company, broken down into component elements, has a weak indirect influence on the efficiency of capital and asset utilization, as it only occurs through resource consumption. However, it directly affects, with a medium intensity, the indicators that represent value creation for investors. With regard to social performance, we can observe that it has a positive influence on financial performance, and this varies in intensity depending on the mix of social involvement (actions, policies, donations, etc.) chosen by company management. Interpreting the statistical results, we note that the degree of social involvement of companies depends on several factors, including social, political, cultural, economic, and socio-economic factors. Future scientific efforts should consider these dimensions when analyzing the phenomenon of social performance. Given the increased significance of the independent variable "GRI Reporting Score", we can say that the standardization of social reporting, though in its early stages, is a vital instrument for bringing to the fore the best practices of corporate social responsibility, with the aim of educating and enhancing competitiveness in this area. The Global Reporting Organization, through the proposed GRI standards, is an important promoter of sustainable business reporting indicators from an ecological, social, and moral perspective.

It can be inferred that the social, political, and cultural geography or the field of activity influence the mix of social indicators and their impact on financial performance. In more conservative areas and fields, labor employment, the cost of donations, or adherence to reporting standards are of greater importance, while in more liberal areas and fields, indicators focused on equal opportunity and human rights are more prominent.

The study's findings suggest that there is a positive correlation between corporate social indicators and financial performance in Europe. Specifically, the results show that social performance scores have a statistically significant impact on financial performance, with higher social performance scores indicating higher financial performance. Moreover, the study found that the strength of this relationship varies across different industries, suggesting that the impact of social indicators on financial performance may be industry-specific. These findings have significant implications for companies operating in Europe, as they indicate that investments in social performance initiatives can have a positive impact on financial performance. However, further research is needed to better understand the causal relationship between social performance and financial performance, as well as to explore the potential moderating effects of other factors such as company size, ownership structure, and industry dynamics.

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